ABSTRACT

A method for calculating and displaying the isothermal contours of the energy produced by a laser in a sample includes applying a laser beam to the focal point of a sample. The region near the focal point is divided into cylinders coaxial with the beam. The maximum temperature reached during the laser pulse of at least three points at arbitrary distances from the focal point is derived. The temperatures calculated are plotted as a function of distance from the focal point sufficient to generate isothermal contours. A computer display is then generated of the isothermal contours corresponding to the temperature calculations.